

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

**(19) World Intellectual Property  
Organization  
International Bureau**



**(43) International Publication Date**  
**1 July 2004 (01.07.2004)**

**PCT**

**(10) International Publication Number**  
**WO 2004/054964 A1**

**(51) International Patent Classification<sup>7</sup>:** C07C 233/18,  
A01N 37/20, 37/26

[DE/DE]; Lettenweg 28B, 79539 Lörrach (DE). **CAVALIERO, Tania** [CH/CH]; Petit-Pontarlier 5, CH-2000 Neuchâtel (CH). **BOUVIER, Jacques** [CH/CH]; Rue des Parcs 2, CH-2000 Neuchâtel (CH).

**(21) International Application Number:**  
PCT/EP2003/014336

**(74) Agent: GRUBB, Phillip; Novartis AG, Corporate Intellectual Property, CH-4002 Basel (CH).**

**(22) International Filing Date:**  
16 December 2003 (16.12.2003)

**(25) Filing Language:** English

(26) **Publication Language:** English

(30) **Priority Data:**  
02028328.9 17 December 2002 (17.12.2002) EP

**(81) Designated States (national):** AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SE, SG, SK, SY, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW.

**(71) Applicant (for all designated States except AT, US): NO-VARTIS AG [CH/CH]; Lichtstrasse 35, CH-4056 Basel (CH).**

**(84) Designated States (regional):** Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

(71) **Applicant (for AT only): NOVARTIS PHARMA GMBH**  
[AT/AT]; Brunner Strasse 59, A-1230 Wien (AT).

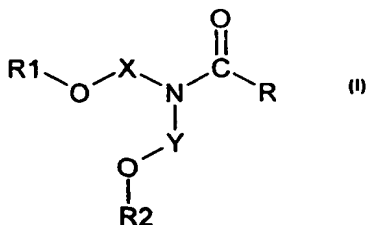
**Published:**  
— *with international search report*

**(72) Inventors; and**

(75) Inventors/Applicants (for US only): **GOEBEL, Thomas**

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**(54) Title: VERMIN-REPELLANT COMPOSITIONS AND COMPOUNDS**



**(57) Abstract:** Compounds of formula ( I ) are described for deterring vermin, wherein R is unbranched or branched C<sub>1</sub>-C<sub>15</sub> alkyl, which is unsubstituted or substituted by halogen, cyano or nitro; R<sub>1</sub> and R<sub>2</sub> are unbranched or branched C<sub>1</sub>-C<sub>12</sub> alkyl, preferably C<sub>1</sub>-C<sub>6</sub> alkyl, which is unsubstituted or substituted by halogen, cyano or nitro; and X and Y, independently of one another, are a straightchain or branched alkylene bridge with 1 to 20 carbon atoms, preferably an alkylene bridge with 1 to 3 carbon atoms, which is unsubstituted or substituted by halogen, cyano or nitro. Furthermore, an essentially non-therapeutical process for deterring vermin is described, which is based on the usage of these compounds, as well as verminrepellent compositions containing these compounds as the active ingredient, and finally the use of these compounds for producing vermin-deterring compositions

and their usage in deterring vermin from animals, humans and objects. New compounds within the scope of formula ( I ) are also described.

**WO 2004/054964 A1**